

REMARKS

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

The present invention as set forth in **Claim 1** relates to a coating liquid for forming a colored transparent conductive film, which comprises noble metal-supporting ruthenium in a fine particle form wherein a noble metal except for ruthenium is supported in a fine particle form on ruthenium.

New Claims 12-21 have been added.

Notably, **new Claim 12** relates to a colored transparent conductive film, comprising: a noble metal, other than ruthenium, in a fine particle form supported on ruthenium in a fine particle form.

JP'540 (JP 2001-54540) (a full translation is attached herewith) and Oka et al (U.S. 6,451,433) fail to disclose or suggest a coating liquid which comprises a noble metal in fine particle form (other than ruthenium) supported on ruthenium in a fine particle form.

Further, the materials in JP'540 and Oka et al are composite materials and not ruthenium fine particles coated with a noble metal.

The crystal structures of Ag, Au, Pt, Pd, Cu and Ru are different. Ag, Au, Pt, Pd and Cu have a face centered cubic (FCC) crystal structure, whereas Ru has a hexagonal closed packing (HCP) crystal structure. As a result, the properties of Ru are different from the properties of the other metals, Ru does not mix with them, but undergoes phase separation.

Further, Ru and noble metals are different in the speed of deposition and easiness thereof. Since Ru is a metal hardly deposited, noble metals such as Au deposit first.

JP'540 discloses the reduction of metal salts of Ru and Ag either simultaneously or separately as a process for producing Ru-Ag composite metal fine particles in a coating solution for forming a transparent conductive coating. However, Ru and Ag precipitate

separately resulting in a composite of Ru fine particles and Ag fine particles, but not in a fine particle of Ag supported on ruthenium. Applicants wish to draw the Examiner's attention to page 12, last two paragraphs of the translation of JP'540. Here, the particles are specifically characterized as "**composite metal fine particles**" (page 12, line 6 from the bottom of the translation of JP'540). There is no disclosure or suggestion that a noble metal is supported on ruthenium.

Oka et al disclose Ag-Ru in column 17, Sample No. 31. However, these particles are composite particles as discussed above. There is no disclosure or suggestion that a noble metal is supported on ruthenium.

In addition, **Claim 3** relates to a method for producing a coating liquid for forming a colored transparent conductive film, wherein a reducing agent is added into a dispersing medium containing ruthenium in a fine particle form, and thereafter a compound of a noble metal except for ruthenium is added thereto, to form a coating liquid for forming a colored transparent conductive film.

JP'540 and Oka et al fail to disclose or suggest a method as claimed.

The fine particles of JP'540 are produced by reducing **two or more types of metal salts** in a mixed solvent (translation, paragraph bridging pages 13 and 14). However, in the present invention, the reducing agent is added to a dispersing medium containing **ruthenium fine particles** and thereafter a compound of another noble metal is added.

JP'540 discloses a second method in which a single component metal fine particle or alloy fine particles are dispersed to obtain composite metal fine particles (translation, page 14, first full paragraph). However, in the present invention, the reducing agent is added to a dispersing medium containing **ruthenium fine particles** and thereafter a **compound of another noble metal** is added. In particular, JP'540 fails to disclose or suggest that the compound of the noble metal is a noble metal salt as set forth in **Claim 21**.

Application No.: 10/726,556

Reply to Office Action dated: October 5, 2004

The fine particles of Oka et al are produced by mixing two metal salt solutions, one of which contains a reducing agent, see for example, columns 7 and 8. In the present invention, however, the reducing agent is added to a dispersing medium containing **ruthenium fine particles** and thereafter a compound of another noble metal is added.

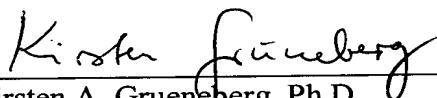
Therefore, the rejection of Claims 1-11 under 35 U.S.C. § 102(b) as anticipated by JP'540 (JP 2001-54540), the rejection of Claims 1 and 3-11 under 35 U.S.C. § 102(e) as anticipated by Oka et al (U.S. 6,451,433) and the rejection of Claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Oka et al (US 6,451,433) are believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of these rejections is respectfully requested.

Applicants respectfully request that the Examiner acknowledge that the **full translation of JP-A-2001-064540**, cited in the **Information Disclosure Statement** filed herewith has been considered.

This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.
Norman F. Oblon


Kirsten A. Grueneberg, Ph.D.
Registration No.: 47,297

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413-2220
NFO:KAG: